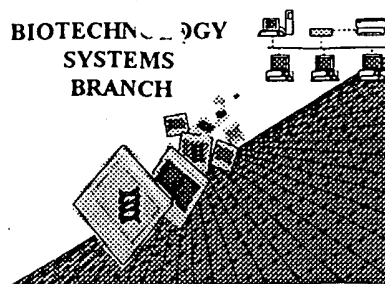


T. Prasthofer

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/429,798

Source: 1627

Date Processed by STIC: 4-17-01

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MAY 01 2001

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/429,798

DATE: 04/17/2001

TIME: 13:01:22

Input Set : A:\9233-8DV1.txt

Output Set: N:\CRF3\04172001\I429798.raw

Does Not Comply
Corrected Diskette Needed

see p. 5

3 <110> APPLICANT: Ekwuribe, Nnochiri
 4 Radhakrishnan, Balasingam
 5 Price, Christopher
 6 Anderson, Wesley
 7 Ansari, Aslam
 9 <120> TITLE OF INVENTION: BLOOD-BRAIN BARRIER THERAPEUTICS
 11 <130> FILE REFERENCE: 9233.8DV1
 13 <140> CURRENT APPLICATION NUMBER: 09/429,798
 14 <141> CURRENT FILING DATE: 1999-10-29
 16 <150> PRIOR APPLICATION NUMBER: 09/134,803
 17 <151> PRIOR FILING DATE: 1998-08-14
 19 <160> NUMBER OF SEQ ID NOS: 52
 21 <170> SOFTWARE: PatentIn version 3.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 6
 25 <212> TYPE: PRT
 26 <213> ORGANISM: synthetic construct
 28 <220> FEATURE:
 29 <221> NAME/KEY: MOD_RES
 30 <222> LOCATION: (6)..(6)
 31 <223> OTHER INFORMATION: Polymer connected to epsilon-amino group
 34 <400> SEQUENCE: 1
 36 Tyr Gly Gly Phe Met Lys
 37 1 5
 39 <210> SEQ ID NO: 2
 40 <211> LENGTH: 6
 41 <212> TYPE: PRT
 42 <213> ORGANISM: synthetic construct
 44 <220> FEATURE:
 45 <221> NAME/KEY: MOD_RES
 46 <222> LOCATION: (1)..(1)
 47 <223> OTHER INFORMATION: Polymer connected to alpha-amino group
 50 <220> FEATURE:
 51 <221> NAME/KEY: MOD_RES
 52 <222> LOCATION: (6)..(6)
 53 <223> OTHER INFORMATION: Polymer connected to epsilon-amino group
 56 <400> SEQUENCE: 2
 58 Tyr Gly Gly Phe Met Lys
 59 1 5
 61 <210> SEQ ID NO: 3
 62 <211> LENGTH: 6
 63 <212> TYPE: PRT
 64 <213> ORGANISM: synthetic construct
 66 <220> FEATURE:
 67 <221> NAME/KEY: MOD_RES
 68 <222> LOCATION: (1)..(1)
 69 <223> OTHER INFORMATION: Polymer connected to alpha-amino group

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/429,798

DATE: 04/17/2001
 TIME: 13:01:22

Input Set : A:\9233-8DV1.txt
 Output Set: N:\CRF3\04172001\I429798.raw

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74 Tyr Gly Gly Phe Met Lys
75 1 5
77 <210> SEQ ID NO: 4
78 <211> LENGTH: 6
79 <212> TYPE: PRT
80 <213> ORGANISM: synthetic construct
82 <220> FEATURE:
83 <221> NAME/KEY: MOD_RES
84 <222> LOCATION: (1)..(1)
85 <223> OTHER INFORMATION: ACETYLATION
88 <220> FEATURE:
89 <221> NAME/KEY: MOD_RES
90 <222> LOCATION: (6)..(6)
91 <223> OTHER INFORMATION: AMIDATION
94 <400> SEQUENCE: 4
96 Phe Arg Trp Trp Tyr Lys
97 1 5
99 <210> SEQ ID NO: 5
100 <211> LENGTH: 6
101 <212> TYPE: PRT
102 <213> ORGANISM: synthetic construct
104 <220> FEATURE:
105 <221> NAME/KEY: MOD_RES
106 <222> LOCATION: (1)..(1)
107 <223> OTHER INFORMATION: ACETYLATION
110 <220> FEATURE:
111 <221> NAME/KEY: MOD_RES
112 <222> LOCATION: (6)..(6)
113 <223> OTHER INFORMATION: AMIDATION
116 <400> SEQUENCE: 5
118 Arg Trp Ile Gly Trp Lys
119 1 5
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 6
123 <212> TYPE: PRT
124 <213> ORGANISM: synthetic construct
126 <220> FEATURE:
127 <221> NAME/KEY: MOD_RES
128 <222> LOCATION: (6)..(6)
129 <223> OTHER INFORMATION: AMIDATION
132 <220> FEATURE:
133 <221> NAME/KEY: UNSURE
134 <222> LOCATION: (6)..(6)/
135 <223> OTHER INFORMATION: Xaa can be any of the twenty naturally occurring amino acids
138 <400> SEQUENCE: 6
W--> 140 Trp Trp Pro Lys His Xaa
141 1 5
143 <210> SEQ ID NO: 7

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/429,798

DATE: 04/17/2001

TIME: 13:01:22

Input Set : A:\9233-8DV1.txt

Output Set: N:\CRF3\04172001\I429798.raw

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144 <211> LENGTH: 4
145 <212> TYPE: PRT
146 <213> ORGANISM: synthetic construct
148 <220> FEATURE:
149 <221> NAME/KEY: MOD_RES
150 <222> LOCATION: (4)..(4)
151 <223> OTHER INFORMATION: AMIDATION
154 <220> FEATURE:
155 <221> NAME/KEY: UNSURE
156 <222> LOCATION: (4)..(4) /
157 <223> OTHER INFORMATION: Xaa is either Lys or Arg
160 <400> SEQUENCE: 7
W--> 162 Trp Trp Pro Xaa
163 1
165 <210> SEQ ID NO: 8
166 <211> LENGTH: 6
167 <212> TYPE: PRT
168 <213> ORGANISM: synthetic construct
170 <220> FEATURE:
171 <221> NAME/KEY: MOD_RES
172 <222> LOCATION: (6)..(6)
173 <223> OTHER INFORMATION: AMIDATION
176 <220> FEATURE:
177 <221> NAME/KEY: UNSURE
178 <222> LOCATION: (6)..(6) /
179 <223> OTHER INFORMATION: Xaa can be any one of the naturally occurring amino acids
182 <400> SEQUENCE: 8
W--> 184 Tyr Pro Phe Gly Phe Xaa
185 1 5
187 <210> SEQ ID NO: 9
188 <211> LENGTH: 7
189 <212> TYPE: PRT
190 <213> ORGANISM: synthetic construct
192 <220> FEATURE:
193 <221> NAME/KEY: MOD_RES
194 <222> LOCATION: (1)..(5)
195 <223> OTHER INFORMATION: Amino acids are in the D-form
198 <220> FEATURE:
199 <221> NAME/KEY: MOD_RES
200 <222> LOCATION: (6)..(6)
201 <223> OTHER INFORMATION: n is 0 or 1
204 <220> FEATURE:
205 <221> NAME/KEY: MOD_RES
206 <222> LOCATION: (7)..(7) /
207 <223> OTHER INFORMATION: Xaa is Gly or the D-form of a naturally occurring amino acid
210 <220> FEATURE:
211 <221> NAME/KEY: MOD_RES
212 <222> LOCATION: (7)..(7)
213 <223> OTHER INFORMATION: AMIDATION

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RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/429,798

DATE: 04/17/2001
 TIME: 13:01:22

Input Set : A:\9233-8DV1.txt
 Output Set: N:\CRF3\04172001\I429798.raw

```

216 <400> SEQUENCE: 9
W--> 218 Ile Met Ser Trp Trp Gly Xaa
219 1 5
221 <210> SEQ ID NO: 10
222 <211> LENGTH: 6
223 <212> TYPE: PRT
224 <213> ORGANISM: synthetic construct
226 <220> FEATURE:
227 <221> NAME/KEY: MOD_RES
228 <222> LOCATION: (1)..(4)
229 <223> OTHER INFORMATION: Amino acids are in the D-form
232 <220> FEATURE:
233 <221> NAME/KEY: MOD_RES
234 <222> LOCATION: (6)..(6) /
235 <223> OTHER INFORMATION: Xaa is Gly or the D-form of a naturally-occurring amino acid
238 <220> FEATURE:
239 <221> NAME/KEY: MOD_RES
240 <222> LOCATION: (6)..(6)
241 <223> OTHER INFORMATION: AMIDATION
244 <400> SEQUENCE: 10 /
W--> 246 Ile Met Thr Trp Gly Xaa
247 1 5
249 <210> SEQ ID NO: 11
250 <211> LENGTH: 4
251 <212> TYPE: PRT
252 <213> ORGANISM: synthetic construct
254 <220> FEATURE:
255 <221> NAME/KEY: MOD_RES
256 <222> LOCATION: (2)..(2)
257 <223> OTHER INFORMATION: Xaa is A1, wherein A1 is the D-form of Nve or Nle
260 <220> FEATURE:
261 <221> NAME/KEY: MOD_RES
262 <222> LOCATION: (3)..(3)
263 <223> OTHER INFORMATION: Xaa is B2, wherein B2 is Gly, Phe, or Trp
266 <220> FEATURE:
267 <221> NAME/KEY: MOD_RES
268 <222> LOCATION: (4)..(4) /
269 <223> OTHER INFORMATION: Xaa is C3, wherein C3 is Trp or Nap
272 <220> FEATURE:
273 <221> NAME/KEY: MOD_RES
274 <222> LOCATION: (4)..(4)
275 <223> OTHER INFORMATION: AMIDATION
278 <400> SEQUENCE: 11
W--> 280 Tyr Xaa Xaa Xaa
281 1
283 <210> SEQ ID NO: 12
284 <211> LENGTH: 3
285 <212> TYPE: PRT
286 <213> ORGANISM: synthetic construct

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/429,798

DATE: 04/17/2001

TIME: 13:01:22

Input Set : A:\9233-8DV1.txt

Output Set: N:\CRF3\04172001\I429798.raw

288 <220> FEATURE:
 289 <221> NAME/KEY: MOD_RES
 290 <222> LOCATION: (1)..(1)
 291 <223> OTHER INFORMATION: Tyr has at its N-terminus an Me-x-H-y-N group, wherein x is 0, 1,
 292 or 2; and y is 0, 1, or 2, with the proviso that x and y is neve
 293 r greater than ? *incomplete explanation.*
 296 <220> FEATURE:
 297 <221> NAME/KEY: MOD_RES
 298 <222> LOCATION: (1)..(2)
 299 <223> OTHER INFORMATION: The amine between the first Tyr and the second Tyr is methylated
 303 <220> FEATURE:
 304 <221> NAME/KEY: MOD_RES
 305 <222> LOCATION: (3)..(3)
 306 <223> OTHER INFORMATION: Xaa is Xaa-z, wherein Xaa is Phe, (D)Phe, or NHBzl, and wherein z
 307 is 0 or ? *incomplete explanation*
 310 <220> FEATURE:
 311 <221> NAME/KEY: MOD_RES
 312 <222> LOCATION: (3)..(3)
 313 <223> OTHER INFORMATION: AMIDATION
 316 <400> SEQUENCE: 12
 W--> 318 Tyr Tyr Xaa
 319 1
 321 <210> SEQ ID NO: 13
 322 <211> LENGTH: 6
 323 <212> TYPE: PRT
 324 <213> ORGANISM: synthetic construct
 326 <220> FEATURE:
 327 <221> NAME/KEY: MOD_RES
 328 <222> LOCATION: (4)..(4) /
 329 <223> OTHER INFORMATION: Xaa is D4, wherein D4 is Lys or Arg
 332 <220> FEATURE:
 333 <221> NAME/KEY: MOD_RES
 334 <222> LOCATION: (5)..(5)
 335 <223> OTHER INFORMATION: His is His-z, wherein z is 0 or 1
 338 <220> FEATURE:
 339 <221> NAME/KEY: MOD_RES
 340 <222> LOCATION: (6)..(6)
 341 <223> OTHER INFORMATION: Xaa is Xaa-z, wherein Xaa is a naturally occurring amino acid and
 342 z is 0 or ? *incomplete explanation*
 345 <220> FEATURE:
 346 <221> NAME/KEY: MOD_RES
 347 <222> LOCATION: (6)..(6)
 348 <223> OTHER INFORMATION: AMIDATION
 351 <400> SEQUENCE: 13
 W--> 353 Trp Trp Pro Xaa His Xaa
 354 1 5
 356 <210> SEQ ID NO: 14
 357 <211> LENGTH: 4
 358 <212> TYPE: PRT

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.